Abstract

Class of Service (CoS) allows a user to share attributes between entries in a way that is transparent to an application. This is achieved by generating the values of the attributes by a CoS logic at the time of or immediately prior to the time the entry is transmitted to an application, rather than storing the values of the attributes with the attribute itself. In alternative embodiments, the attributes may be generated at a time well before the time the entry is transmitted to an application.

A CoS includes a CoS Definition entry and a Template entry. These two entries interact to provide attribute values to target entries within their CoS "scope" based on the target entry's DN, presence or absence of the target entry's CoS attribute, the attribute value stored in the target entry's CoS Template, and other factors. The CoS Definition entry, which is stored as an LDAP subentry below the branch at which it is effective, identifies the type of CoS being used. The Template entry contains a list of attribute values that are shared. Any change made to the template entry's attribute values is automatically applied to all entries that share the attribute.